REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

I. Status of the Application

Claims 1 - 3 remain in this application. Claims 1 - 3 have been amended, and new claim 4 has been added. No new matter is introduced. Support for the amendments may be found, for example, at page 12, lines 12 - 23, page 13, lines 1 - 8, page 14, lines 8 - 11 and page 17, lines 18 - 25 of Applicants' specification.

II. Rejections under 35 U.S.C. §§ 102, 103

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,237,713 to Onodera et al. Claims 1 - 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,155,376 to Cheng in view of Onodera. Applicants amend claims 1 - 3 to further define the nature of their invention, and respectfully traverse these rejections.

In amended independent claim 1, Applicants disclose:

> **1.** A steering apparatus for a vehicle, comprising:
>
> a steering shaft supported in a cylindrical housing so that the steering shaft can freely move in an axial direction; and
>
> a nut member screwed onto a screw groove formed in an outer circumference of the steering shaft through a rolling member and rotatably supported in the housing,
>
> wherein steering is performed by transmitting rotation of a motor, which is driven according to steering, to the nut member and converting rotation of the nut member into movement of the steering shaft,
>
> the housing is constructed by coaxially connecting a first housing having an integrally formed fixing section for fastening to a vehicle body with a second housing having a fixing section for fastening to the vehicle body in a separate member, ~~and~~
>
> the nut member is supported by a thrust bearing fitted and fixed in the first housing so that the nut member cannot move in both directions along an axial direction, and

> a radial bearing is fitted and fixed in the second housing, wherein the nut member is respectively supported at two points along a axis of the nut bearing by the thrust bearing and the radial bearing. (emphasis added)

With reference to FIG. 1 of Onodera, an electric power steering unit is disclosed that includes a first housing A coaxially connecting a second housing B housing a nut member 19 screwed onto a screw groove of drive shaft 2 through rolling members 3, and driven by a motor 1. Onadera also discloses angular bearing 4 supporting nut member 19 in housing B, which provides support for thrust loads as well as axial loads, and bearing 17, which supports an armature shaft 11 of the motor 1 in first housing A. However, in sharp contrast to Applicants' claimed steering apparatus, the device of Onodera fails to disclose a radial bearing fitted to the second housing which combines with the thrust bearing fitted to the first housing to provide two points of support for the thrust bearing. Rather, in the device of Onodera, the nut member 19 is supported exclusively by the angular bearing 4. Applicants claimed device provides the advantage of more effectively resisting momentum generated on the gear 8, to reduce gear wear and gear noise over prior art steering apparatus. Accordingly, Applicants respectfully submit that amended independent claim 1 is not anticipated by Onodera, and is therefore allowable.

With reference to FIG. 1 of Cheng, an electric power steering assembly is disclosed having a first housing 58 that is coaxial to a second housing 50, a ball nut assembly 70 screwed onto screw portion 40 via transmitting members 74, and a motor 60 having a gear 114 that drives a mating gear 78 on the ball nut assembly 70. A thrust bearing 76 supports the ball nut assembly in housing 50. The Examiner acknowledges that Cheng fails to disclose Applicants' claimed fixing sections on each of the first and second housings, and cites Onodera for teaching this additional limitation. However, even when combined with Onodera, the combination of Onodera and Cheng still fails to teach or suggest Applicants' claimed radial bearing fitted to the second housing which combines with the thrust bearing fitted to the first housing to provide two points of support for the thrust bearing. Accordingly, Applicants respectfully submit that amended independent claim 1 is not made obvious by the combination of Cheng with Onodera, and is therefore allowable.

Accordingly, Applicants respectfully submit that the cited references, both individually and in combination, fail either to anticipate or make obvious Applicants' steering apparatus as claimed in amended independent claim 1, and that amended independent claim 1 is therefore currently

allowable. As dependent claims 2 and 3 each respectfully depend from allowable claim 1, Applicants further submit that dependent claims 2 and 3 are also allowable for at least this reason.

III. New Claim 4

New dependent claim 4 recites:

> **4.** The steering apparatus for a vehicle as set forth in claim 3, wherein a cylindrical transmission housing is loosely fitted and fixed within the motor support cylinder projecting outward from the first housing or the second housing, and an adjustment screw is provided as a mesh adjusting section which is capable of applying an adjusting force the transmission housing by penetrating a peripheral wall of the motor support cylinder from the outside to the inside thereof so as to move the transmission housing within the motor support cylinder by spiral movement of the adjustment screw.

As new claim 4 indirectly depends from allowable claim 1, Applicants further submit that new dependent claim 4 is also allowable for at least this reason.

CONCLUSION

Therefore, in view of the above amendments and remarks, it is respectfully requested that a Notice of Allowance as to all pending claims be issued in this case.

If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

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Respectfully submitted,

By _____

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